

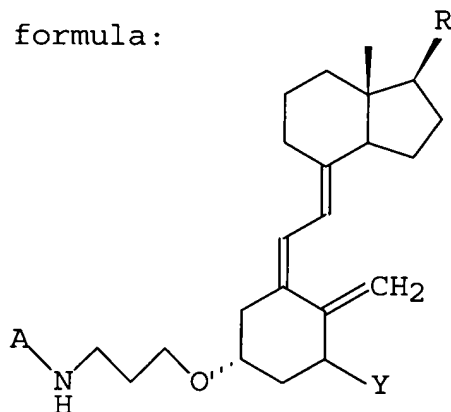
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-13. (canceled)

14. (previously presented) A method of obtaining a vitamin D compound of the formula:



wherein:

R represents a 25-hydroxy side-group of vitamin D<sub>2</sub> or of vitamin D<sub>3</sub>;

Y represents hydrogen or hydroxy;

A represents a functional group, coupled via a spacer group, which can be bound by a protein with high affinity; comprising;

a) cyanoethylating the 3-hydroxy group of a vitamin D starting compound in the presence of potassium hydride and tertiary butanol;

- b) adding lithium hydride and converting the 25-hydroxy group into the lithium alcoholate and subsequently reducing the nitrile group with lithium aluminum hydride; and
- c) linking a spacer group together with a functional group A on the amino propylether side chain.

15. (previously presented) The method according to claim 14, wherein the functional group A is selected from biotin, digoxigenin, amino acids, characteristic amino acids and peptide sequences, FITC, proteins and peptide groups, protein-A, protein G and vitamin D derivatives.

16. (previously presented) The method according to claim 14, wherein the functional group A is 25-hydroxy vitamin D or  $1\alpha$ , 25-dihydroxy vitamin D.

17. (previously presented) The method according to claim 14, wherein the functional vitamin D group is coupled in the  $3\beta$ -position via an ether bridge with the spacer group.

18. (previously presented) The method according to claim 14, wherein step c) is effected with biotinyl-n- $\epsilon$ -amino caproyl-

hydroxy-succinimide ester (LC-BHNS) or an activated biotinylation reagent.

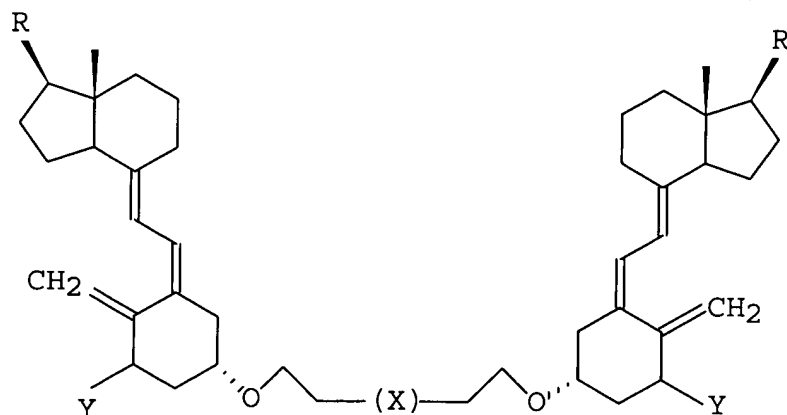
19. (previously presented) Method according to claim 14, wherein the spacer group is an amino carboxylic acid radical, an amino undecanoic acid radical or an amino polyether radical.

20. (previously presented) A method of producing a 3-amino propylether-25-hydroxy or 3-amino propylether-1 $\alpha$ ,25-dihydroxy vitamin D intermediate compound, comprising;

- a) cyanoethylating the 3-hydroxy group of a vitamin D starting compound in the presence of potassium hydride and tertiary butanol;
- b) adding lithium hydride and converting the 25-hydroxy group into the lithium alcoholate and subsequently reducing the nitrile group with lithium aluminum hydride.

21-24. (canceled)

25. (previously presented) A vitamin D compound of the formula:



wherein;

R represents a 25-OH side group of vitamin D, or

Y represents hydrogen or hydroxyl and

X represents a substituted or non-substituted hydrocarbon group of 0.8 to 4.2 nm length, which optionally contains the heteroatoms S, O, N, and P.

26. (currently amended) The vitamin D compound according to claim 25, obtained by a process comprising

- a) cyanoethylating the 3-hydroxy group of a vitamin D starting compound in the presence of potassium hydride and tertiary butanol;
- b) adding lithium hydride and converting the 25-hydroxy group into the lithium alcoholate and subsequently reducing the nitrile group with lithium aluminum hydride to generate a

vitamin D derivative containing an amino propylether side chain;  
and

c) linking a spacer group together with a functional group A on the amino propylether side chain wherein A represents a functional group, coupled via a spacer group, which can be bound by a protein with high affinity and

wherein in step c) two vitamin D aminopropyl compounds are coupled by condensing with a dicarboxylic acid.